

UNITED STATES PATENT AND TRADEMARK OFFICE

CERTIFICATE OF CORRECTION

PATENT NO. : 7,001,745 B1
APPLICATION NO. : 09/786,009
DATED : February 21, 2006
INVENTOR(S) : Ming-qun Xu et al.

Page 1 of 1

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

On title page, item 57 Abstract

replace

with

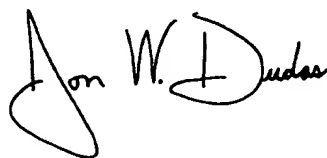
(57) **ABSTRACT**

The present invention provides methods that utilize compositions containing colostrinin, a constituent peptide thereof, an active analog thereof, and combinations thereof, as an oxidative stress regulator.

(57) Abstract: An in vitro method for producing a semisynthetic fusion protein is provided, whereby a target protein fuse to an intein - a protein splicing element - is selectively cleaved in a first step as depicted in Figure 1 with a thiol reagent, forming a carboxyl-terminal thioester of the target protein and releasing the target protein from the intein. In a subsequent step as shown in Figure 1, a desired, synthetic, protein or peptide having an amino-terminal cysteine is ligated to the target protein. Standard thiol-reagents such as DTT, or thiol-reagents optimized for ligation such as the odorless MESNA, may be used in the first step. The method permits the direct ligation of a desired peptide to a thioester bond that had linked a target protein to an intein. An in vivo variation of the method will permit production of a cytotoxic protein: a truncated, inactive, form of the protein fused to an intein is introduced in vivo, this fusion product is then selectively cleaved, and a synthetic protein or peptide is subsequently ligated at a carboxyl-terminal thioester of the target protein in order to restore the native activity of the cytotoxic protein.

Signed and Sealed this

Twenty-sixth Day of December, 2006



JON W. DUDAS

Director of the United States Patent and Trademark Office